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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
KUBELIK, ANNE R	

ART UNIT	PAPER NUMBER
1638	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,114	LIANG ET AL.	
	Examiner	Art Unit	
	Anne R. Kubelik	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) *11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 12-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Group I (claims 1-10 and 12-19) in the reply filed on 14 July 2010 is acknowledged. Claim 11 is withdrawn from consideration as being drawn to a nonelected invention.

2. The disclosure is objected to for not using the metric system on, for example, pg 7, line 29, and pg 15, lines 4, 12-14, 18 and 24. See 608.01 (IV). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-10 and 12-19 are rejected under 35 USC 112, first paragraph, as containing subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification teaches no soybean meal with at least 58% protein on a dry weight basis.

The claims require soybean meal with at least 58% protein on a dry weight basis.

The instant specification, however, only does not teach any soybean meal with at least 58% protein on a dry weight basis. The highest protein content of the "high protein" soybean meal made in Example 3 is 54.4% protein on a dry weight basis (Table 6); that used in Example 4 had 55.9% protein on a dry weight basis (Table 7).

Thus, the specification fails to teach how to make the claimed soybean meal.

A deposit statement is required for soybean deposited under ATCC Accession number PTA-5764.

Dependent claim 18 requires soybean deposited under ATCC Accession number PTA-5764. Such seed is essential to the claimed invention, and it must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public. It is not clear if such a seed is readily available to the public.

It is noted that soybean has been deposited at the ATCC under ATCC Accession number PTA-5764, but there is no affirmative statement in the specification that all restrictions upon availability to the public will be irrevocably removed upon granting of the patent.

If the deposit of these seeds is made under the terms of the Budapest Treaty, then an affidavit or declaration by the Applicant, or a statement by an attorney of record over his or her signature and registration number, stating that the seeds will be irrevocably and without restriction or condition released to the public upon the issuance of a patent would satisfy the deposit requirement made herein. A minimum deposit of 2500 seeds is considered sufficient in the ordinary case to assure availability through the period for which a deposit must be maintained.

If the deposit has not been made under the Budapest Treaty, then in order to certify that the deposit, meets the requirements set forth in 37 CFR 1.801-1.809, Applicant may provide assurance of compliance by an affidavit or declaration, or by a statement by an attorney of record over his or her signature and registration number showing that

(a) during the pendency of the application, access to the invention will be afforded to the Commissioner upon request;

(b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;

(c) the deposit will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the enforceable life of the patent, whichever is longer;

(d) the viability of the biological material at the time of deposit will be tested (see 37 CFR 1.807); and

(e) the deposit will be replaced if it should ever become inviable.

In addition, the identifying information set forth in 37 CFR 1.809(d) should be added to the specification. See 37 CFR 1.801 - 1.809 [MPEP 2401-2411.05] for additional explanation of these requirements.

5. Claims 1-10 and 12-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims require soybean meal with at least 58% protein on a dry weight basis. However, the specification has not reduced to practice any soybean meal with at least 58% protein on a dry weight basis. The highest protein content of the "high protein" soybean meal made in Example 3 is 54.4% protein on a dry weight basis (Table 6); that used in Example 4 had 55.9% protein on a dry weight basis (Table 7).

Thus, one of skill in the art would not recognize that Applicant was in possession of the soybean meal with at least 58% protein on a dry weight basis, and the specification fails to provide an adequate written description of the claimed invention.

Therefore, given the lack of written description in the specification with regard to the structural and functional characteristics of the claimed compositions, Applicant does not appear to have been in possession of the claimed genus at the time this application was filed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 12, 13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Oliveira et al (US Patent Application Publication 2003/0157239).

Oliveira et al disclose a process that makes soybean meal with a minimum of 58.0% protein on a dry weight basis (example 1). Oliveira et al also disclose a method of feeding swine feed comprising the soybean meal (example 3).

8. Claims 1-6 and 12-17 rejected under 35 U.S.C. 102(b) as being anticipated by Kerr et al (2000, US Patent 6,147,193).

Kerr et al claim a soybean protein product, including soybean meal, with 42%-89% protein on a dry weight basis (claim 1). Kerr et al do not teach the protein and protein-plus-oil contents of the soybean used to make this meal, but such a product would be indistinguishable form a soybean meal made form a soybean with a protein content of at least 45% or an oil-plus-

protein content of at least 64%. Kerr et al teach a feed comprising the soybean meal (Table 13) and the feeding of cockerels with the meal (paragraph spanning columns 52-53).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-10 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliveira et al (US Patent Application Publication 2003/0157239) in view of Nickell (US 7,053,272, filed July 2002).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

The claims are drawn to soybean meal with at least 58% protein on a dry weight basis and methods of feeding it to livestock, including poultry.

Oliveira et al teach a process that makes soybean meal with a minimum of 58.0% protein on a dry weight basis (example 1) and a method of feeding swine feed comprising the soybean meal (example 3). The process makes an oil fraction and a meal fraction (¶44).

Oliveira et al do not teach soybean deposited at the ATCC under ATCC Accession number PTA-5764.

Nickell claims soybean deposited at the ATCC under ATCC Accession number PTA-5764 (claim 1) and soybean made by transforming that soybean with a transgene, including one that confers resistance to a herbicide (claims 14-15). This soybean has a protein content of 46.2% and a protein-plus-oil content of 64.6% (Table 2).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify make soybean meal from the soybean claimed in '272, for example, by using the method described in 2003/0157239. One of ordinary skill in the art would have been motivated to do so because soybean meal is one of the economically important products made from soybean seeds. Such meal would have at least 62% protein on a dry weight basis given the high starting protein content of the seed.

One of ordinary skill in the art would have been motivated to transform the soybean with a gene that confers resistance to glyphosate because glyphosate is the most commonly used herbicide in agricultural practices that involve spraying growing fields to kill weeds.

One of ordinary skill in the art would have been motivated to feed animals, including poultry, feed comprising the soybean meal because its high protein content would be very nutritionally advantageous for livestock.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined

application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-10, 12-16 and 18-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 12/299,432.

Although the conflicting claims are not identical, they are not patentably distinct from each other. Swine feed made from soybean, including that deposited at the ATCC under ATCC Accession number PTA-5764, and having at least 58% protein on a dry weight basis, and methods of feeding swine with the feed comprising soybean meal having at least 58% protein on a dry weight basis, as claimed in the issued patent, makes obvious soybean meal having at least 58% protein on a dry weight basis, including from soybean deposited at the ATCC under ATCC Accession number PTA-5764, and methods of feeding the meal to swine, as claimed in the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 1-10 and 12-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 7,053,272 in view of Oliveira et al (US Patent Application Publication 2003/0157239). .

'272 claims soybean deposited at the ATCC under ATCC Accession number PTA-5764 (claim 1) and soybean made by transforming that soybean with a transgene, including one that confers resistance to a herbicide (claims 14-15). This soybean has a protein content of 46.2% and a protein-plus-oil content of 64.6% (Table 2). '272 does not claim soybean meal made form the soybean or methods of feeding to animals, including poultry.

2003/0157239 teaches a process that makes soybean meal with a minimum of 58.0% protein on a dry weight basis (example 1) and a method of feeding swine feed comprising the soybean meal (example 3). The process makes an oil fraction and a meal fraction (¶44).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify make soybean meal from the soybean claimed in '272, for example, by using the method described in 2003/0157239. One of ordinary skill in the art would have been motivated to do so because soybean meal is one of the economically important products made from soybean seeds. Such meal would have at least 62% protein on a dry weight basis given the high starting protein content of the seed.

One of ordinary skill in the art would have been motivated to transform the soybean with a gene that confers resistance to glyphosate because glyphosate is the most commonly used herbicide in agricultural practices that involve spraying growing fields to kill weeds.

One of ordinary skill in the art would have been motivated to feed animals, including poultry, feed comprising the soybean meal because its high protein content would be very nutritionally advantageous for livestock.

Conclusion

14. No claim is allowed.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne R. Kubelik, Ph.D., whose telephone number is (571) 272-0801. The examiner can normally be reached Monday through Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg, can be reached at (571) 272-0975.

The central fax number for official correspondence is (571) 273-8300.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

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August 19, 2010

/Anne R Kubelik/
Primary Examiner, Art Unit 1638